**VBA Script for Module 2 Challenge**

Sub Worksheet\_Loop()

'Reference/credit for this sub only (apply macro to multiple sheets):

'Please see https://github.com/davidjaimes/yearly-stock-market-analysis

Dim xsheet As Worksheet

For Each xsheet In ThisWorkbook.Worksheets

xsheet.Select

Call stock\_data

xsheet.Range("I:Q").Columns.AutoFit

Next xsheet

End Sub

Sub stock\_data():

'Set an initial variable for the Ticker Symbol

Dim Ticker\_Symbol As String

'Set an initial variable for Yearly Change

Dim Yearly\_Change As Double

Yearly\_Change = 0

'Set an initial variable for Opening Price

Dim Opening\_Price As Double

Opening\_Price = 0

'Set an initial variable for Closing Price

Dim Closing\_Price As Double

Closing\_Price = 0

'Set an initial variable for Percent Change

Dim Percent\_Change As Double

Percent\_Change = 0

'Set an initial variable for Total Stock Volume

Dim Total\_Stock\_Volume As Double

Total\_Stock\_Volume = 0

'Create Summary Table Column Headers

Range("I1") = "Ticker"

Range("J1") = "Yearly Change"

Range("K1") = "Percent Change"

Range("L1") = "Total Stock Volume"

'Create Table for Greatest Inrease, Decrease, and Total Volume

Range("P1") = "Ticker"

Range("Q1") = "Value"

Range("O2") = "Greatest % Increase"

Range("O3") = "Greatest % Decrease"

Range("O4") = "Greatest Total Volume"

'Set a variable for the Ticker symbol with the greatest percent increase

Dim Max\_Ticker\_Symbol As String

Max\_Ticker\_Symbol = " "

'Set a variable for the Ticker symbol with the greatest percent decrease

Dim Min\_Ticker\_Symbol As String

Min\_Ticker\_Symbol = " "

'Set a variable for the Max percent

Dim Max\_Percent As Double

Max\_Percent = 0

'Set a variable for the Min percent

Dim Min\_Percent As Double

Min\_Percent = 0

'Set a variable for the stock ticker symbol with the greatest total volume

Dim Greatest\_Volume\_Ticker As String

Greatest\_Volume\_Ticker = " "

'Set a variale for the Max\_Volume

Dim Max\_Volume As Double

Max\_Volume = 0

'Keep track of the location for each Ticker Symbol in the summary table

Dim Summary\_Table\_Row As Integer

Summary\_Table\_Row = 2

'Set initial value of Opening Price for the first Ticker Symbol

Opening\_Price = Cells(2, 3).Value

'Define last row

Lastrow = Cells(Rows.Count, 1).End(xlUp).Row

'Loop through all Ticker Symbols

For i = 2 To Lastrow

'Check to see if we are still on the same Ticker Symbol, if we are not...

If Cells(i + 1, 1).Value <> Cells(i, 1).Value Then

'Set the Ticker Symbol

Ticker\_Symbol = Cells(i, 1).Value

'Calculate the Yearly Change

Closing\_Price = Cells(i, 6).Value

Yearly\_Change = Closing\_Price - Opening\_Price

'Calculate Percent Change (include instructions for 0 values)

If Opening\_Price <> 0 Then

Percent\_Change = (Yearly\_Change / Opening\_Price) \* 100

End If

'Calculate Total Stock Volume

Total\_Stock\_Volume = Total\_Stock\_Volume + Cells(i, 7).Value

'Print the Ticker Symbol to the Summary Table

Range("I" & Summary\_Table\_Row).Value = Ticker\_Symbol

'Print the Yearly Change to the Summary Table

Range("J" & Summary\_Table\_Row).Value = Yearly\_Change

'Format Yearly Change Cell Color (Red for decrease, Green for increase)

If (Yearly\_Change > 0) Then

Range("J" & Summary\_Table\_Row).Interior.ColorIndex = 4

ElseIf (Yearly\_Change < 0) Then

Range("J" & Summary\_Table\_Row).Interior.ColorIndex = 3

End If

'Print Percent Change to the Summary Table

Range("K" & Summary\_Table\_Row).Value = Percent\_Change

'Format the Percent change to display as a percentage

Range("K" & Summary\_Table\_Row).Value = (CStr(Percent\_Change) & "%")

'Print Total Stock Volume to the Summary Table

Range("L" & Summary\_Table\_Row).Value = Total\_Stock\_Volume

'Add one to the summary table row

Summary\_Table\_Row = Summary\_Table\_Row + 1

'Get next Opening Price

Opening\_Price = Cells(i + 1, 3).Value

'Calculate Greatest Inrease, Decrease, and Total Volume

'Credit/acknowledgement reference for this section'

'https://splynters.com/stock-market-data

If (Percent\_Change > Max\_Percent) Then

Max\_Percent = Percent\_Change

Max\_Ticker\_Symbol = Ticker\_Symbol

ElseIf (Percent\_Change < Min\_Percent) Then

Min\_Percent = Percent\_Change

Min\_Ticker\_Symbol = Ticker\_Symbol

End If

If (Total\_Stock\_Volume > Max\_Volume) Then

Max\_Volume = Total\_Stock\_Volume

Greatest\_Volume\_Ticker = Ticker\_Symbol

End If

'Print to Greatest Increase, Decrease, Total Volume Table

Range("Q2").Value = (CStr(Max\_Percent) & "%")

Range("Q3").Value = (CStr(Min\_Percent) & "%")

Range("P2").Value = Max\_Ticker\_Symbol

Range("P3").Value = Min\_Ticker\_Symbol

Range("Q4").Value = Max\_Volume

Range("P4").Value = Greatest\_Volume\_Ticker

'Reset values

Percent\_Change = 0

Total\_Stock\_Volume = 0

'if the next Ticker Symbol is the same as the Ticker Symbol in the previous row

Else

'Keep adding to Total Stock Volume

Total\_Stock\_Volume = Total\_Stock\_Volume + Cells(i, 7).Value

End If

Next i

End Sub